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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/101,341 07/08/98 MALMGREN

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EXAMINER

WHITE, E

ART UNIT

PAPER NUMBER

1623

DATE MAILED:

03/16/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/101,341

Applicant(s)
MALMGREN et al.

Examiner
Everett White

Group Art Unit
1623



☒ Responsive to communication(s) filed on Sep 22, 2000

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-17 and 19 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-17 and 19 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

1. Amendment C filed September 22, 2000 has been received and entered into the record.
2. Claims 1-17 and 19 are pending in the case.
3. All 35 U.S.C. statutes not cited in this Office action can be found cited in full in a previous Office action.

Claim Objections

4. Claims 1-17 and 19 are objected to because of the following informalities: In Claims 1-17 and 19, the terms "fibre" and "fibres" (all occurrence) should be changed to --fiber-- and --fibers-- , respectively. In Claim 11, the term "gelan" should be changed to --gellan--. Appropriate correction is required.

35 U.S.C. 103 Rejection

5. Claims 1-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huber et al (US Patent No. 5,549,861).

Applicants claim a method of producing polysaccharide fibers, comprising the steps of dissolving a polysaccharide in a solvent, thereby forming a solution, and spraying the solution into a bath which contains a water-miscible organic solvent and a cross-linker wherein the solvent dissolving the polysaccharide is water.

The Huber et al patent discloses a process for the production of shaped structures of cellulose or fibers that involve dissolving cellulose derivatives in water to give a viscous shaping solution, the solution is filtered and process by a dry shaping process to give shaped structure of cellulose derivatives of cellulose fibers (see column 2, lines 17-22). In the shaping process as disclosed by Huber et al, the shaping solution is pressed through a die at a high speed (see column 30, lines 30-33). Huber et al indicates that the cellulose derivative structure thus shaped can be regenerated by heat treatment and/or by chemical hydrolysis. See Examples 1 and 2 of the Huber et al patent of a process for preparing cellulose fibers. Also see Example 3 wherein the fibers are hydrolyzed in methanolic KOH. The instant claimed invention differ from the Huber et al patent by cross-linking the polysaccharide. However, the Cottrell et al patent suggests that the use of

cross-linked polysaccharides to prepare absorbent materials is well known in the art. See column 3, line 30 of the Cottrell et al patent wherein Cottrell et al discloses polysaccharides that have been cross-linked with aluminum and zirconium which are also set forth as cross-linking agents in instant Claim 9. It would have been obvious to one of ordinary skill in the art at the time the invention was made to cross-link the cellulose fibers of the Huber et al patent with cross-linkers in view of the recognition in the art, as evidenced by Cottrell et al patent, that use of cross-linking agents increases the absorbent properties of polysaccharides.

6. Applicant's arguments with respect to Claims 1-17 and 19 have been considered but are moot in view of the new ground(s) of rejection.

State of the Art

7. Ruf (US Patent No. 5,601,771) which discloses the production of cellulose fibers, wherein the a solution of cellulose in an aqueous tertiary amine-oxide is extruded into filaments into a substantially aqueous precipitation bath is cited to further show the state of the art.

8. **Summary:** All the claims are rejected.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Examiner's Telephone Number, Fax Number, and Other Information

10. For 24 hour access to patent application information 7 days per week, or for filing applications electronically, please visit our website at www.uspto.gov and click on the button "Patent Electronic Business Center" for more information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to E. White whose telephone number is (703) 308-4621. The examiner can normally be reached on Monday-Friday from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Geist, can be reached on (703) 308-1701. The fax phone number for this Group is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1235.

E. White

White

March 13, 2001



GARY GEIST
SUPERVISORY PATENT EXAMINER
TECH CENTER 1600